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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 41278-2022

**Stored cereal grains and pulses - Guidance on the detection of
infestation by stored product insect pest by trapping**

谷物和豆类储存 仓储害虫的诱捕检测指导

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" drafted.

This document is modified to adopt ISO 16002:2004 "Guidelines for trapping and testing of live invertebrates stored in grains and legumes".

Compared with ISO 16002:2004, this document has the following structural adjustments.

--- Added 7.1, and the subsequent clause numbers are adjusted accordingly.

Technical differences between this document and ISO 16002:2004 and their reasons.

a) Deleted "invertebrates" not cited in the main text;

- b) Amend "some countries" in Chapter 6 to "some regions";
- c) Deleted the content of 7.3.3 "A small amount of cloth strips soaked with dichlorvos (where permitted by national or local regulations) can be placed in the barrel", I National GB/T 29890 stipulates that dichlorvos cannot be used for raw grain storage;
- d) Deleted the expression "methylbromide" mentioned in D.2 in Appendix D, my country is a signatory of the "Montreal Agreement".

One of the treaty countries, the agreement clearly stipulates a complete ban on the production and application of methyl bromide by 2012.

The following editorial changes have been made to this document.

--- Modify the name of the standard to "Guidelines for trapping and testing of pests in storage and storage of grains and pulses";

--- Added references.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Cereals and beans are the commodities with large trade volume among food raw materials, and their storage periods and storage conditions vary greatly, and they are easily infected by insects and mites. Insect mites the risk of infection varies depending on the storage method, storage time, temperature and humidity of the ecological environment, etc. In areas with high temperature and humidity, even short-term storage Grains and legumes can also cause significant infestation and loss due to mites. Infestation of grains and legumes by mites can cause quality and commercial value loss, reduced nutritional value, and even disease in animals and humans.

Grain and legume storage Guidance on trapping and testing of storage pests

1 Scope

This document describes the detection of stored pests (live pests and mites) by trapping of grains and pulses stored in packaged or bulk form.

method.

This document is applicable to the detection of storage pests (living pests and mites) using traps for storing grains in bulk or packaging in cylindrical bins and bungalows.

place.

2 Normative references

There are no normative references in this document.

3 Terms and Definitions

The following terms and definitions apply to this document.

grains

A general term for grains and legumes.

beetle beetles

Species of certain coleopteran pests that occur in grain storage sites.

Note: Several weevil species of the Coleoptera Weevils are susceptible pests in stored grains, and there is a "covert state" infection. Coleopteran insects also include several other important species.

moths

Species of certain lepidopteran pests that occur in grain storage sites.

Note: Butterflies and moths belong to Insecta Lepidoptera, but butterflies do not occur in food storage places. Moths usually do not have the bright colors of butterflies, and they are mostly at night flight between.

infection infestation A phenomenon in which live pests and mites at certain developmental stages appear in food and cause damage.

natural pheromone

A chemical odorant that is produced by an individual organism and affects the behavior of other individuals of the same or related species.

synthetic pheromone

Synthesized analogs with natural pheromone effects that replicate the molecular structure of natural pheromones.

NOTE: Synthetic pheromones are often used to deceive and interfere with male insect mating, such as moth trapping in agriculture and food storage.